

- 12 -

### Patent Claims

1. A guide element with a base body having at least two guide surfaces disposed on different non-parallel planes (A, B<sub>1</sub>, B<sub>2</sub>), **characterized by**

the guide surfaces (5a, 5b, 6a, 6b, 7a) having a pre-fabricated strip (10a, 10b, 10c, 11) applied to them, consisting of carrier material (12) with a sliding material (13, 13a, 13b) placed thereon.

2. A guide element according to Claim 1, **characterized by** the strip (10a, 10b, 10c, 11) having been applied to the base body (2, 2') by means of laser welding.

3. A guide element with a T-shaped base body according to Claim 1 or 2 above, respectively, **characterized by** at least the interior guide surfaces (5a, 5b, 6a, 6b), which are disposed at right angles to each other, having strips (10a, 10b).

4. A guide element according to Claims 1 through 3 above, respectively, **characterized by** each of the guide surfaces (5a, 5b, 6a, 6b, 7a) having its own sliding strip (10a, 10b).

surfaces (5a, 5b, or 6a, 6b), which are disposed on different planes, having one common strip (11).

- 13 -

6. A guide element according to Claims 1 through 5 above, respectively, **characterized by** the base body (2, 2') consisting of structural steel (ST 37), and the carrier material (12) also consisting of steel or stainless steel.
7. A guide element according to Claims 1 through 6 above, respectively, **characterized by** the sliding material (13, 13a, 13b) consisting of a sintering material.
8. A guide element according to Claims 1 through 7 above, respectively, **characterized by** the sliding material (13, 13a, 13b) consisting of a copper-tin alloy.
9. A guide element according to Claim 8 above, **characterized by** the copper-tin alloy containing PTFE and/or graphite.
10. A guide element according to Claim 9 above, **characterized by** the PTFE portion amounting to 8% to 10% of weight.
11. A guide element according to Claim 9 or 10 above, **characterized by** the graphite portion amounting to 8% to 12% of weight.

13. Use of a guide element according to Claims 1 through 12 above, respectively, for molds used in the manufacturing of rubber tires.

- 14 -

14. Use of a guide element according to Claim 12 above for molds used in the manufacturing of automotive tires, truck tires, or industrial tires.

15. A method for the production of a guide element with a base body having at least two guide surfaces disposed on various non-parallel planes, **characterized by**

the fact that the strip consisting of a carrier material with a sliding material placed thereon is pre-fabricated, and

the fact that the strip(s) is(are) applied to a guide surface by means of laser welding.

16. A method according to Claim 15, **characterized by** the fact that the strip is laser welded along at least one longitudinal edge as well as both end edges.

17. A method according to Claims 15 or 16, **characterized by** the fact that the strip is fabricated with at least two sliding material areas, which are divided by an uncoated area on the carrier material, and

the fact that the strip is bent in the uncoated area to correspond to the planes of contiguous guide surfaces to be